

**ABSTRACT OF THE INVENTION**

The invention relates to fluorescence calibration devices and methods that  
5 can mimic skin and other tissues. A calibration device of the invention comprises at  
least one scattering layer, which is preferably non-fluorescent, and a second layer  
containing one or more fluorophore. Light passes through the scattering layer and  
excites the fluorophore. Light emitted from the fluorophore passes back though the  
scattering layer and into collecting optics, which can be measured and that  
10 measurement used to correct for instrument drift.

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